**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Constant Acceleration Review**

Use the graph below to answer questions #1-4 that follow:



1. Give a written description to describe the motion of an object you choose and energies of the entire system.

2. Draw the motion map for the object. Include velocity and acceleration vectors. Draw bar graphs of the energy of the

system at 0 seconds and at 10 seconds.

4. Assume the initial velocity was 50 m/s; determine the acceleration of the object (FINAL VELOCITY WOULD BE 0 M/S).

5. A Saturn, initially at rest, accelerates at a constant rate of 2.0 m/s2 for 10 s. How fast will the car be traveling at **t** =10 s?

6. For each of the position vs time graphs shown below, draw the corresponding

**v** vs **t**, **a** vs **t** , and motion map.



7. Using the graph below, compare the motion of the two objects.



**Comparison: is A > B, A < B, or A = B, How do you know?**

a. Distance traveled at 3 s

b. **Average** velocity from 0- 3 s

c. **Instantaneous** velocity at 3 s